## Abstract of the Disclosure

A stator bobbin for axial winding is made from insulating material and includes a first disc, a second disc, and a connecting tube that connects the first disc with the second disc. The connecting tube has a central hole and a space for winding is defined between the first disc and the second disc. A first pole plate is attached to an outer side of the first disc and a second pole plate is attached to an outer side of the second disc. A distance between an outer end of the inner side of the first disc and an outer end of the inner side of the second disc is greater than that between an inner end of the inner side of the first disc and an inner end of the inner side of the second disc.